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ABSTRACT

This paper examines the use of a circumplex model of family interaction patterns for explaining variance in work and family role salience and vocational identity in a sample of 173 college students (107 women, 65 men). Results indicate a significant link between perceived emotional closeness and structural flexibility in the family-of-origin and higher levels of salience for family roles. Significant relationships between dimensions of the family interaction model and levels of work-role salience and vocational identity were not found. Career assessments and interventions that attend to perceived family-of-origin dynamics may be of significant use and benefit in assisting clients to better comprehend and fit the role of family into their life-careers. Research and counseling interventions may need to focus less on these family dimensions and more on the individual traits, states, and goals when considering clients' work-role salience and vocational identity development. Further research is needed to determine more precisely the degree of transportability of the family circumplex model to the vocational domain. (Contains 2 tables and 53 references.) (Author/MKA)

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Family Interaction Patterns and Career Development

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Abstract

We examined use of a circumplex model of family interaction patterns for explaining variance in work and family role salience and vocational identity in a sample of 173 college students (107 women, 65 men). Results indicated a significant link between perceived emotional closeness and structural flexibility in the family-of-origin and higher levels of salience for family roles. Significant relationships between dimensions of the family interaction model and levels of work-role salience and vocational identity were not found. Career assessments and interventions that attend to perceived family-of-origin dynamics may be of significant use and benefit in assisting clients to better comprehend and fit the role of family into their life-careers. Research and counseling interventions may need to focus less on these family dimensions and more on individual traits, states, and goals when considering clients' work-role salience and vocational identity development. Further research is needed to determine more precisely the degree of transportability of the family circumplex model to the vocational domain.

Most major career theories specify or imply relationships between family variables and vocational outcomes and career development processes (Blustein, Walbridge, Friedlander, & Palladino, 1991). Tests of Roe's (1956, 1957) theory aside, however, few studies have directly investigated these purported links. This research gap perhaps prompted Blustein and his colleagues to comment that "the exact nature of the family's contribution to the career decision-making process remains unclear" (p. 39). However, research, including that of Blustein et al., as well as theoretical articles on psychological separation and attachment (Lopez, 1992; Lopez & Andrews, 1987) have begun to specify family influences on career choice and development. Some of this research has directly investigated work-family links specified in theory (for a review, see Greenhaus & Parasuraman, 1999). Notably, Smart (1989) examined and found evidence for the relative influence of family background factors such as SES and parents' occupations on Holland vocational type development. Similarly, Trice, Hughes, Odom, Woods, and McClellan (1995) found support, albeit mixed, for hypothesized family-career relationships derived from the theories of Ginzberg (1952), Roe (1957), Havighurst (1964), and Gottfredson (1981).

To further determine whether family variables explain significant amounts of variance in constructs articulated in career theories, researchers have turned to Bowen's (1978) family

systems theory and Minuchin's (1974) structural family theory. Numerous conceptual articles have also used family theories to describe career development and to suggest career counseling interventions (Bradley, 1984; Bradley & Mims, 1992; Bratcher, 1982; Lopez, 1992; Moon, Coleman, McCollum, Nelson, & Jensen-Scott, 1993; Morrow, 1995; Okiishi, 1987). Empirical works have produced a distinct body of literature on family-of-origin dynamics and career development and decision-making processes. Results of two studies in this realm found weak empirical support (Kinnier, Brigman, & Noble, 1990) and no empirical support (Eigen, Hartman, & Hartman, 1987) for a relationship between family interaction patterns and career decision making. Findings from other studies in this vein, however, indicate that family interaction patterns do significantly relate to variables such as vocational identity (Lopez, 1989; Penick & Jepsen, 1992), mastery of the career developmental tasks of crystallizing and specifying an occupational choice (Penick & Jepsen, 1992), career search self-efficacy (Ryan, Solberg, & Brown, 1996), and patterns of co-worker relations (MacGregor & Cochran, 1988). Overall, this line of research lends empirical support to the assertion that family interaction patterns may contribute significantly to vocational outcomes (Schulenberg, Vondracek, & Crouter, 1984). It also bolsters Penick and Jepsen's call for further research on the relationship between family dynamics and career development.

In the present study, we examined the explanatory value of a theoretical model derived from family systems theory for understanding role salience and vocational identity -- constructs articulated in Super's (Super, Savickas, & Super, 1996) and Holland's (1995) theories, respectively. Specifically, we examined family interaction patterns relative to levels of work and family role salience and vocational identity.

Career Development and a Family Systems Model

A literature review of family influences on career development identified family interaction patterns as a fruitful domain within which to explain vocational outcomes (Schulenberg et al., 1984). Family interaction patterns have been conceptualized along two dimensions of a circumplex model that includes an adaptability and a cohesion component (Olson, Sprenkle, & Russell, 1979). The adaptability component refers to the degree of structural and functional flexibility present in a family system. On the adaptability dimension, families may range from chaotic to flexible to structural to rigid. Families in the mid (flexible and structural) ranges evidence more healthy adaptability than those at the extremes (chaotic and rigid) because they can appropriately change their structure (e.g., membership) and function (e.g., how they communicate) in response to environmental demands and stressors. The cohesion component of the model refers to the degree of emotional closeness between and among family

members. On the cohesion dimension, families may range from enmeshed to connected to separated to disengaged. Connected and separated families maintain more moderate levels of closeness and intimacy and function more effectively than those with relationships that are enmeshed or disengaged. Theoretically, then, extremes on either component suggest family dysfunction, whereas low to moderate adaptability and cohesion levels indicate more balanced or optimal family functioning. Psychometrically, these components are measured using a linear scale such that higher scores on an index of either dimension indicate more healthy family functioning (Olson, 1991).

Research has yielded a broad base of empirical support for the family systems circumplex model (for reviews, see Gorall & Olson, 1995; Olson, 1993). In their literature review, Schulenberg et al. (1984) called for empirical studies of the applicability of this model to career development and vocational behavior. To date, we could find only one such study that has responded to this call (Eigen et al., 1987). The Eigen et al. study found that chronically career undecided students were more apt to come from either firmly structured and emotionally connected families (i.e., too tight) or from vaguely structured and emotionally separated families (i.e., too loose). These findings prompted Eigen et al. to conclude that using the model in the vocational domain warrants further research.

Purpose of the Study

In the present study, we examined whether and how levels of family adaptability and cohesion relate to role salience and vocational identity as components of career development. Role salience denotes the extent to which an individual participates in, commits to, and expects to realize values through roles played out in various theaters such as school, work, family, community, and leisure (Super, Savickas, & Super, 1996). Vocational identity means possessing "a clear and stable picture of one's goals, interests, and talents" related to work (Holland, Gottfredson, & Power, 1980, p. 1191). We chose to examine these two vocational variables in relation to the dimensions of the family circumplex model because role salience incorporates both the work and family domains and because previous research has supported a significant relationship between vocational identity and perceived family functioning (Lopez, 1989; Penick & Jepsen, 1992).

As an exploratory study, we structured the investigation around two primary research questions. First, we examined whether and how scores on a measure of family adaptability and cohesion would relate to scores on a measure of salience for work and family roles. We could find no research that specifically examines the extent to which family functioning influences the levels of salience individuals develop for work and family roles. Could it be, for example, that individuals who perceive their

families-of-origin as more well-functioning indicate higher levels of salience for work and family roles because their families appropriately support and encourage their participation in, commitment to, and value expectations for these roles? Second, we investigated whether and how adaptability and cohesion scores would relate to scores on a measure of vocational identity.

Blustein (1994) theorized that optimal vocational identity development requires balanced family adaptability and cohesion. In this sense, we were interested in the question of to what extent does perceived health of the family-of-origin relate to vocational identity development. Could it be, for example, that individuals who perceive their families as more functionally adaptable and cohesive possess a clearer sense of their vocational goals, talents, and interests?

Method

Participants

A total of 173 undergraduate students (107 women, 65 men) participated in the study. One participant did not indicate age or sex on the personal data sheet provided. Most participants (91.3%) were seniors between the ages of 21 and 25 years (age range = 17-25 years). Of the participants who responded to the demographic questionnaire, 70% were liberal arts majors, 26% were commerce majors, 3% were either education, engineering, or nursing majors, and 1% was undecided. The vast majority of

participants identified their ethnic background as Anglo-American.

Measures

Saliency Inventory. We used the Saliency Inventory (SI; Super & Nevill, 1985) to operationally define levels of saliency for work and family roles. The 170-item SI measures the extent to which individuals participate in, commit to, and expect to realize values in five life roles: student, worker, citizen, homemaker (including spouse and parent), and leisurite. Three composite scales -- Participation, Commitment, and Value Expectations -- assess each of these five roles thereby yielding 15 subscale scores. The Participation scale uses 50 items to assess behaviors performed presently or in the recent past (i.e., "what you actually do or have done recently") in the five life roles. The Commitment scale contains 50 items measuring attitudes toward (i.e., "how do you feel about") each role. The Values Expectations scale contains 70 affectively-based items measuring the anticipated degree to which each life role will allow values to be realized. Higher scores on any one scale indicate more saliency for the corresponding role.

Test-retest correlations range from .81 to .94 for a sample of college students and from .82 to .95 for a sample of adults (Nevill & Super, 1986). The SI has also been judged by Nevill and Super to have acceptable content, construct, and concurrent validity.

Family Adaptability and Cohesion Evaluation Scales

Perceived levels of cohesion and adaptability within the family of origin were operationally defined by scores on the Family Adaptability and Cohesion Evaluation Scales - III (FACES III; Olson, Portner, & Lavee, 1985). FACES III represents the third in a series of FACES instruments designed to measure the two primary dimensions of the Olson et al. (1979) circumplex model. The instrument's 20 items divide evenly into 10 Adaptability scale items and 10 Cohesion scale items. Adaptability items measure the perceived level of flexibility within the family system and its capacity to change its structure and relationships in response to situational or developmental stress. Cohesion items measure the perceived degree to which family members feel connected to or separated from the family system. Using a five-point Likert scale ranging from "almost never" (1) to "almost always" (5), respondents indicate the extent to which each statement describes their family of origin. Scores range from 10 to 50 on each subscale and from 20 to 100 for the total measure. Higher scores on either dimension indicate more functional family relationships (Olson, 1991). Higher Adaptability scores indicate more functionally "flexible" families. Higher Cohesion scale scores indicate more functionally "connected" families.

Olson, Portner, and Lavee (1985) reported separate internal consistency estimates for Adaptability ($r = .62$), Cohesion ($r =$

.77), and the FACES III total scale ($r = .68$). They also reported four- to five-week test-retest reliability coefficients of .80 (Adaptability) and .83 (Cohesion). The present sample produced coefficient alphas of .75 for Adaptability, .91 for Cohesion, and .87 for the total measure. Evidence also exists to support the content and construct validity of the measure (Olson et al., 1985).

Vocational Identity Scale. Level of vocational identity was operationally defined by the Vocational Identity Scale (VIS) of My Vocational Situation (MVS; Holland et al., 1980). According to Holland et al., vocational identity means possessing awareness of and an ability to specify one's interests, personality characteristics, strengths, and goals as they relate to career choices. The VIS contains 18 statements to which individuals respond "true" or "false." Each true response receives a score of zero and each false response receives a score of one. Summing the total number of false responses yields a score ranging from 0 to 18. Higher scores indicate higher levels of vocational identity.

Holland, Johnston, and Asama (1993) and Leong and Morris (1989) provided evidence for the validity of using the VIS as an index of vocational identity. The MVS manual reports an internal consistency reliability of .89 for the VIS. Internal consistency estimates of the VIS items in the present study reached a coefficient alpha value of .86.

Data Analyses

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Scale means and standard deviations on all measures were computed separately for both women and men. To test for gender differences, a *t*-test of independent means was conducted for each measure used in the present study. A zero-order correlation matrix was produced for the FACES III scales with all scales of the criterion measures. Stepwise regression procedures were used to examine the value of FACES III scale scores in predicting scores on the work-role salience, family-role salience, and vocational identity measures.

Results

Descriptive statistics appear in Table 1. *T*-test results indicated significant gender differences in mean scores on the FACES III total scale ($M = 62.89$ for women; $M = 57.62$ for men) and on the FACES III Cohesion scale ($M = 37.61$ for women; $M = 34.08$ for men). The effect sizes of these differences were .47 and .44, respectively, and of low to moderate magnitude (Cohen, 1988). Given these findings, we decided to combine the data for subsequent analyses rather than conducting separate analyses by gender.

Table 2 contains the Pearson product-moment correlation matrix for all measures. The Participation in Home (PH), Commitment to Home (CH), and Value Expectations for Home (VEH) scale scores of the SI related positively and significantly to scores on particular FACES III scales. Significant correlations at

the $p < .01$ level emerged between PH and the FACES III total score ($r = .45$), PH and Adaptability ($r = .27$), CH and FACES III total ($r = .32$), CH and Cohesion ($r = .34$), VEH and FACES III total ($r = .23$), and VEH and Cohesion ($r = .22$). Although of relatively low magnitude, these statistically significant findings indicate the presence of a positive relationship between perceived level of family functioning and salience for home and family roles such as parent, spouse, and child. These data suggest that individuals who rate their families of origin as more flexible and emotionally connected participate more in family-related activities such as parenting, caretaking, or homemaking. They also feel more emotionally invested in home and family roles both now and for the future, and they expect to realize their values through involvement in roles in the family domain. Turning to the FACES III scale scores relative to the SI work-role scale scores and VIS scores, Table 2 indicates no significant correlations between these variables. Neither level of family adaptability or cohesion appears linked to salience for work or vocational identity.

As a means of directly examining the ability of FACES III scale scores to predict scores on the SI and VIS, we performed both linear and multiple regression analyses. Linear regression analyses indicated that neither Adaptability nor Cohesion scores explained statistically significant amounts of variance in scores on the work salience, home salience, or vocational identity measures.

Likewise, results of multiple linear regression analyses using combined Adaptability and Cohesion scores to predict SI and VIS scores failed to reach statistical significance.

Discussion

Vocational theorists have long assumed that the family plays a pivotal role in career choice and development (Herr & Lear, 1984). Over 40 years ago, Super (1957) contended that family variables such as attitudes and interpersonal relations influence career choice and adjustment. Roe (1956, 1957) hypothesized that family interaction patterns contribute significantly to vocational outcomes although research has provided at best nominal support for Roe's proposed link between parental attitudes and childrens' ultimate career choices (Osipow, 1983; Roe & Lunneborg, 1990). Other theorists have also identified family factors that may influence career choice and development such as parents (Holland, 1959; 1985), family training experiences and modeling (Krumboltz, 1979; Mitchell & Krumboltz, 1990), family-mediated sex-role typing (Gottfredson, 1981), and family emotional support in identity development (Bordin, 1990).

The present investigation examined whether family interaction patterns, as conceptualized in a circumplex model derived from family systems theory, could be used to empirically demonstrate purported links between family-of-origin dynamics and vocational behavior. Results indicated that the adaptability and

cohesion dimensions of the Olson et al. (1979) model have a direct, positive relationship with home and family role salience. These findings indicate a link between growing up in a functionally adaptable and cohesive family and possessing salience for home and family roles later in life. Greater levels of salience for home and family roles at least correspond to and may result from individuals' perceived experiences of growing up in a family system with an ability to adapt to change and a healthy emotional closeness. Consequently, in terms of family-role salience, it may indeed be important for researchers and counselors to consider the family as an important factor in the level of importance people ascribe to roles played out in the theater of home and family life such as parent, partner, spouse, and homemaker.

Family adaptability and cohesion did not relate significantly to work-role salience or vocational identity among the college students studied. This finding suggests that individuals develop and maintain levels of work-role salience and vocational identity independent of the levels of emotional closeness and rule and role flexibility that they perceive existed in their families of origin. That is, the present findings imply that the degree of felt emotional closeness and structural flexibility in the family system of origin contributes in no significant way to the degree of importance placed on the work role in one's life or on the level of vocational identity development achieved. This could be explained

by the possibility that individuals at this age, 20-22 years, are separating and individuating from parents and therefore seek to establish their own identities in the work role separate from their families.

Although certainly not conclusive, these particular findings of the study differ from some theorizing (Blustein, 1994) and research outcomes (Penick & Jepsen, 1992) that support the role of family relationships in career development. Whereas Penick and Jepsen found evidence for perceived family functioning as a significant predictor of adolescent vocational identity, the present data do not support its use as a predictor of college student vocational identity. The present findings are more consistent with those of Eigen et al. (1987) who found no significant relationship between the dimensions of the Olson et al. family circumplex model and career indecision. Our findings, in one sense, raise questions about the usefulness of family-of-origin dynamics in explaining vocational behavior outcomes of work-role salience and vocational identity. Generalized to individuals similar to the participants comprising the present sample (i.e., Anglo-American college students), these particular findings suggest that vocational researchers and career counseling practitioners may need to focus less on family background and more on individual traits (e.g., aptitudes, interests, and values), states (e.g., decided or undecided), and goals when examining the salience of work in people's lives as

well as the levels of vocational identity individuals possess. This suggestion gains support from previous research indicating that the family may have little influence on Anglo-American career development and vocational behavior (Hartung, Speight, & Lewis, 1996). Further research that includes participants of more culturally diverse backgrounds should be conducted to determine whether such findings would be replicated.

The non-randomness and homogeneity of the sample used in the present study clearly constrains the generalizability of the results. Also, asking participants to retrospectively assess the degrees of cohesion and adaptability in their families of origin may have produced biased or erroneous results due to memory inaccuracies. The use of self-report measures also raises questions of social desirability effects that may limit the validity of the present findings. Including a measure of social desirability in subsequent studies may attenuate this potential problem.

Future research with more diverse and systematically selected samples, and that accounts for the potential limitations described herein may produce more generalizable and conclusive findings. One logical next step in this line of research would involve exploring the present hypotheses with a more representative and systematic sampling methodology. Another reasonable and desirable step to further the present inquiry would entail comparatively examining these or similar hypotheses with

groups representing various demographic characteristics.

Vocational theorists and practitioners have long recognized family factors as potentially valuable for understanding and explaining individual career development and vocational behavior (Fouad, 1993; Ibrahim, Ohnishi, & Wilson, 1994; Leong, 1993; Leong & Leung, 1994; Zimmerman & Cochran, 1993). Empirical research, including the present study, has produced mixed results, however, in terms of supporting or not supporting links between family and vocational variables. The present findings suggest that, among Anglo-American college students at least, levels of structural flexibility and emotional connection in the family of origin have no specific association with levels of work importance or clarity and stability of vocational goals, interests, and talents. The family adaptability and cohesion dimensions of the Olson et al. (1979) model as influences on work-role salience and vocational identity thus seem questionable given the present findings. The degrees to which an individual participates in, commits to, and expects to realize values in home and family roles, however, do appear linked to perceived emotional and structural health in the family of origin. Potential therefore exists in using the Olson et al. (1979) family systems model as an explanatory tool for understanding family role salience levels. Determining with more certainty the precise degree of transportability of the family circumplex model to the vocational domain will require

continued research in this vein.

References

- Blustein, D. L. (1994). Who am I: The question of self and identity in career development. In M. L. Savickas & R. W. Lent (Eds.) *Convergence in career development theories: Implications for science and practice* (pp. 139-154). Palo Alto, CA: Consulting Psychologists Press.
- Blustein, D. L., Walbridge, M. M., Friedlander, M. L., & Palladino, D. E. (1991). Contributions of psychological separation and parental attachment to the career development process. *Journal of Counseling Psychology*, 38, 39-50.
- Bowen, M. (1978). *Family therapy in clinical practice*. New York: Jason Aronson.
- Bordin, E. S. (1990). Psychodynamic model of career choice and satisfaction. In D. Brown, L. Brooks, and Associates (Eds.), *Career choice and development* (2nd Ed.), (pp. 102-144). San Francisco: Jossey-Bass.
- Bradley, R. W. (1984). Using sibling dyads to understand career development. *Personnel and Guidance Journal*, 62, 397-400.
- Bradley, R. W., & Mims, G. A. (1992). Using family systems and birth order dynamics as the basis for a college career decision-making course. *Journal of Counseling and Development*, 70, 445-448.
- Bratcher, W. E. (1982). The influence of the family on career selection: A family systems perspective. *Personnel and Guidance Journal*, 61, 87-91.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. San Diego, CA: Academic Press.
- Eigen, C. A., Hartman, B. W., & Hartman, P. T. (1987). Relations between family interaction patterns and career indecision. *Psychological Reports*, 60, 87-94.
- Fouad, N. A. (1993). Cross-cultural vocational assessment. *Career Development Quarterly*, 42, 4-13.
- Ginzberg, E. (1952). Toward a theory of occupational choice. *Occupations*, 30, 491-494.

Gottfredson, L. S. (1981). Circumscription and compromise: A developmental theory of occupational aspirations. *Journal of Counseling Psychology*, 28, 545-579.

Greenhaus, J. H. & Parasuraman, S. (1999). Research on work, family, and gender: Current status and future directions. In G. N. Powell (Ed.), *Handbook of Gender in Organizations* (pp. 391-412). Thousand Oaks, CA: Sage.

Hartung, P. J., Speight, J. D., & Lewis, D. M. (1996). Individualism-collectivism and the vocational behavior of majority culture college students. *Career Development Quarterly*, 45, 87-96.

Havighurst, R. J. (1964). Youth in exploration and man emergent. In H. Borow (Ed.), *Man in a world of work* (pp. 215-236). Boston, MA: Houghton Mifflin.

Herr, E. L., & Lear, P. B. (1984). The family as an influence on career development. *Family Therapy Collections*, 10, 1-15.

Holland, J. L. (1959). A theory of vocational choice. *Journal of Counseling Psychology*, 6, 35-45.

Holland, J. L. (1985). *Making vocational choices: A theory of vocational personalities and work environments*. Englewood Cliffs, NJ: Prentice-Hall.

Holland, J. L., Gottfredson, G. D., & Power, P. G. (1980). Some diagnostic scales for research in decision making and personality. *Journal of Personality and Social Psychology*, 39, 1191-1200.

Holland, J. L., Johnston, J. A., & Asama, N. F. (1993). The Vocational Identity Scale: A diagnostic and treatment tool. *Journal of Career Assessment*, 1, 1-12.

Ibrahim, F. A., Ohnishi, H., & Wilson, R. P. (1994). Career assessment in a culturally diverse society. *Journal of Career Assessment*, 2, 276-288.

Kinnier, R. T., Brigman, S. L., & Noble, F. C. (1990). Career indecision and family enmeshment. *Journal of Counseling and Development*, 68, 309-312.

Krumboltz, J. D. (1979). A social learning theory of

career decision making. In A. M. Mitchell, G. B. Jones, and J. D. Krumboltz (eds.), *Social learning and career decision making*. Cranston, R. I.: Carroll Press.

Leong, F. T. L. (1993). The career counseling process with racial-ethnic minorities: The case of Asian Americans. *Career Development Quarterly*, 42, 26-40.

Leong, F. T. L., & Leung, S. A. (1994). Career assessment with Asian-Americans. *Journal of Career Assessment*, 2, 240-257.

Leong, F. T. L., & Morris, J. (1989). Assessing the construct validity of Holland, Daiger, and Power's measure of vocational identity. *Measurement and Evaluation in Counseling and Development*, 22, 117-125.

Lopez, F. G. (1989). Current family dynamics, trait anxiety, and academic adjustment: Test of a family-based model of vocational identity. *Journal of Vocational Behavior*, 35, 76-87.

Lopez, F. G. (1992). Family dynamics and late adolescent identity development. In S. D. Brown, & R. W. Lent (Eds.) *Handbook of Counseling Psychology*, pp. 251-283. New York: Wiley.

Lopez, F. G., & Andrews, S. (1987). Career indecision: A family systems perspective. *Journal of Counseling and Development*, 65, 304-307.

MacGregor, A., & Cochran, L. (1988). Work as enactment of family drama. *Career Development Quarterly*, 37, 138-148.

Minuchin, S. (1974). *Families and family therapy*. Cambridge, MA: Harvard University Press.

Mitchell, L. K., & Krumboltz, J. D. (1990). Social learning approach to career decision making: Krumboltz's theory. In D. Brown, L. Brooks, and Associates (Eds.), *Career choice and development* (2nd Ed.), (pp. 145-196). San Francisco: Jossey-Bass.

Moon, S. M., Coleman, V. D., McCollum, E. E., Nelson, T. S., & Jensen-Scott, R. L. (1993). Using the genogram to facilitate career decisions: A case study. *Journal of Family Psychotherapy*,

4, 45-56.

Morrow, M. R. (1995). The influence of dysfunctional family behaviors on adolescent career exploration. *The School Counselor*, 42, 311-316.

Nevill, D. D., & Super, D. E. (1986). *The Salience Inventory: Theory, application, and research*. Palo Alto, CA: Consulting Psychologists Press.

Okiishi, R. W. (1987). The genogram as a tool in career counseling. *Journal of Counseling and Development*, 66, 139-143.

Olson, D. H. (1991). Commentary: Three-Dimensional (3-D) Circumplex Model and revised scoring of FACES III. *Family Process*, 30, 74-79.

Olson, D. H., Portner, J., & Lavee, Y. (1985). FACES III. In D. H. Olson, H. I. McCubbin, H. Barnes, A. Larsen, M. Muxen, & M. Wilson (Eds.), *Family inventories* (pp. 1-42). University of Minnesota, St. Paul, MN: Family Social Science.

Olson, D. H., Sprenkle, D. H., & Russell, C. S. (1979). Circumplex model of marital and family systems: I. Cohesion and adaptability dimensions, family types, and clinical applications. *Family Process*, 18, 3-28.

Osipow, S. H. (1983). *Theories of career development* (3rd ed.). Englewood Cliffs, N.J.: Prentice-Hall.

Penick, N. I., & Jepsen, D. A. (1992). Family functioning and adolescent career development. *Career Development Quarterly*, 40, 208-222.

Roe, A. (1956). *The psychology of occupations*. New York: Wiley.

Roe, A. (1957). Early determinants of vocational choice. *Journal of Counseling Psychology*, 4, 212-217.

Roe, A., & Lunneborg, P. W. (1990). Personality development and career choice. In D. Brown, L. Brooks, and Associates (Eds.), *Career choice and development* (2nd Ed.), (pp. 68-101). San Francisco: Jossey-Bass.

Ryan, N. E., Solberg, V. S., & Brown, S. D. (1996). Family dysfunction, parental attachment, and career search self-

efficacy among community college students. *Journal of Counseling Psychology*, 43, 84-89.

Schulenberg, J. E., Vondracek, F. W., & Crouter, A. C. (1984). The influence of the family on vocational development. *Journal of Marriage and the Family*, 46, 129-143.

Smart, J. C. (1989). Life history influences on Holland vocational type development. *Journal of Vocational Behavior*, 34, 69-87.

Super, D. E. (1957). *The psychology of careers*. New York: Harper and Row.

Super, D. E. (1990). A life-span, life-space approach to career development. In D. Brown, L. Brooks, and Associates (Eds.), *Career choice and development* (2nd Ed.), (pp. 197-261). San Francisco: Jossey-Bass.

Super, D. E. (1985). *The Salience Inventory*. Palo Alto, CA: Consulting Psychologists Press.

Super D. E., Savickas, M. L., & Super, C. M. (1996). The life-span, life-space approach to careers. In D. Brown & L. Brooks (eds.) *Career choice and development: Applying contemporary theories to practice* (3rd ed.). San Francisco, CA: Jossey-Bass.

Tice, A. D., Hughes, M. A., Odom, C., Woods, K., & McClellan, N. C. (1995). The origins of children's aspirations: IV. Testing hypotheses from four theories. *Career Development Quarterly*, 43, 307-322.

Zimmerman, J., & Cochran, L. (1993). Alignment of work and family roles. *Career Development Quarterly*, 41, 344-349.

Table 1

Descriptive Statistics, Reliability Estimates, and t-Tests of Independent Means for All Measures

	<u>Alpha</u>	<u>Males</u>		<u>Females</u>		<u>Total</u>		<u>T</u>
		<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	
<u>FACES III</u>	.87	57.62	11.53	62.89	10.58	60.94	11.19	-3.00**
<u>COHES</u>	.91	34.08	7.82	37.61	7.78	36.29	7.94	-2.88**
<u>ADAPT</u>	.75	23.77	5.57	25.36	5.67	24.80	5.6	-1.77
<u>VIS</u>	.86	11.40	4.44	9.99	4.85	10.56	4.72	1.74
<u>SI</u>								
<u>CW</u>	.82	33.14	4.44	32.07	4.97	32.47	4.78	1.46
<u>CH</u>	.91	33.92	5.73	35.21	5.22	34.73	5.42	-1.46
<u>PW</u>	.86	24.29	5.29	22.87	5.71	23.49	5.67	1.66
<u>PH</u>	.85	23.52	5.34	24.87	5.03	24.39	5.18	-1.63
<u>VEW</u>	.84	44.85	5.72	43.46	5.80	44.02	5.79	1.53
<u>VEH</u>	.86	43.06	6.78	44.07	7.00	43.68	6.90	-.93

Note. FACES III = Family Adaptability and Cohesion Evaluation Scales; COHES = Cohesion Scale; ADAPT = Adaptability Scale; VIS = Vocational Identity Scale; SI = Salience Inventory; CW = Commitment to Work; CH = Commitment to Home; PW = Participation in Work; PH = Participation in Home; VEW = Value Expectations for Work; VEH = Value Expectations for Home. Score ranges = 20-100 for FACES III; 10-50 for COHES and ADAPT; 0-18 for VI; 10-40 for CW, CH, PW, and PH; 14-56 for VEW and VEH.

** $p < .01$; * $p < .05$.

Table 2

Correlation Matrix for All Measures

	1	2	3	4	5	6	7	8	9	10
1. FACES	1.00									
2. COHES	.88**	1.00								
3. ADAPT	.74**	.34**	1.00							
4. VIS	.02	.04	-.03	1.00						
5. PW	.03	.02	.00	.18*	1.00					
6. CW	.03	.06	-.03	.26**	.39**	1.00				
7. VEW	-.04	-.05	-.03	.20*	.39**	.64**	1.00			
8. PH	.45**	.44	.27**	.19*	.27**	.19*	.12	1.00		
9. CH	.32**	.34**	.15	.29**	.08	.32**	.10	.59**	1.00	
10. VEH	.23**	.22**	.12	.26**	.18*	.19*	.30**	.50**	.64**	1.00

Note. FACES III = Family Adaptability and Cohesion Evaluation Scales; COHES = Cohesion Scale; ADAPT = Adaptability Scale; VIS = Vocational Identity Scale; CW = Commitment to Work; CH = Commitment to Home; PW = Participation in Work; PH = Participation in Home; VEW = Value Expectations for Work; VEH = Value Expectations for Home.

** $p < .01$; * $p < .05$.